AMENDMENTS TO THE CLAIMS:

Claim 60 is canceled without prejudice or disclaimer. The following is the status of the claims of the above-captioned application, as amended.

Claims 1-46 (Canceled).

Claim 47 (Previously presented). A process for producing a soluble starch hydrolysate, comprising subjecting an aqueous granular starch slurry at a temperature below the initial gelatinization temperature of said granular starch to the action of a first enzyme and a second enzyme, wherein:

(a) the first enzyme

(i) is a member of the Glycoside Hydrolase Family 13;

(ii) has alpha-1,4-glucosidic hydrolysis activity; and

(iii) comprises a functional carbohydrate-binding module belonging to CBM Family 20, wherein the carbohydrate-binding module comprises an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO: 2; and

(b) the second enzyme is a fungal alpha-amylase, a beta-amylase, or a glucoamylase.

Claim 48 (Previously presented). The process of claim 47, wherein the carbohydrate-binding module comprises an amino acid sequence having at least 95% homology to the amino acid sequence of SEQ ID NO: 2.

Claim 49 (Previously presented). The process of claim 47, wherein the starch slurry has 20-55% dry solids granular starch.

Claim 50 (Previously presented). The process of claim 49, wherein at least 85% of the dry solids of the granular starch is converted into a soluble starch hydrolysate.

Claim 51 (Previously presented). The process of claim 47, further comprising subjecting the granular starch slurry to the action of an isoamylase or a pullulanase.

Claim 52 (Previously presented). The process of claim 47, wherein the temperature is at least 58°C.

Claim 53 (Previously presented). The process of claim 47, wherein the pH is in the range of 3.0 to 7.0.

Claim 54 (Previously presented). The process of claim 47, wherein the soluble starch hydrolysate has a DX of at least 94.5%.

Claim 55 (Previously presented). The process of claim 47, wherein the granular starch is obtained from tubers, roots, stems, whole grain, corn, cobs, wheat, barley, rye, milo, sago, cassava, tapioca, sorghum, rice or potatoes.

Claim 56 (Previously presented). The process of claim 47, wherein the granular starch is obtained from dry milling of whole grain or from wet milling of whole grain or from milled corn grits.

Claim 57 (Previously presented). The process of claim 47, wherein the process is conducted in an ultrafiltration system and where the retentate is held under recirculation in presence of enzymes, raw starch and water and where the permeate is the soluble starch hydrolysate.

Claim 58 (Previously presented). The process of claim 47, wherein the process is conducted in a continuous membrane reactor with ultrafiltration membranes and where the retentate is held under recirculation in presence of enzymes, raw starch and water and where the permeate is the soluble starch hydrolysate.

Claim 59 (Previously presented). The process of claim 47, wherein the process is conducted in a continuous membrane reactor with microfiltration membranes and where the retentate is held under recirculation in presence of enzymes, raw starch and water and where the permeate is the soluble starch hydrolysate.

Claim 60 (Canceled).

Claim 61 (Previously presented). A process for production of high fructose starch-based syrup (HFSS), comprising converting a soluble starch hydrolysate produced by the process of claim 47 into high fructose starch-based syrup (HFSS).

Claim 62 (Previously presented). A process for production of a fermentation product, comprising fermenting a soluble starch hydrolysate produced by the process of claim 47 into a fermentation product.

Claim 63 (Previously presented). The process of claim 62, wherein the fermentation product is selected from the group consisting of citric acid, monosodium glutamate, gluconic acid, sodium gluconate, calcium gluconate, potassium gluconate, glucono delta lactone, sodium erythorbate, itaconic acid, lactic acid, gluconic acid; ketones; amino acids, glutamic acid (sodium monoglutaminate), penicillin, tetracyclin, enzymes, vitamins, and hormones

Claim 64 (Previously presented). A process for production of fuel or potable ethanol, comprising fermenting a soluble starch hydrolysate produced by the process of claim 47 into ethanol.

Claim 65 (Previously presented). The process of claim 64, wherein the fermentation step is carried out simultaneously or separately/sequential to the hydrolysis of the granular starch.